

## FCA Rerouting DST, Phase I

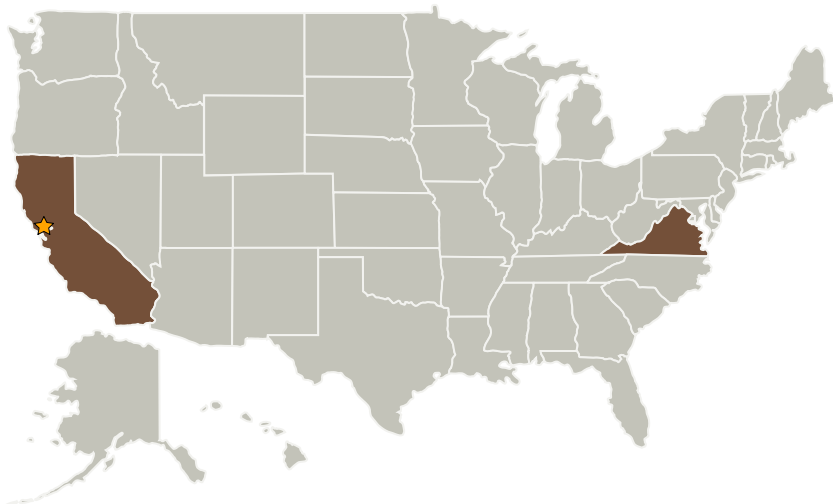
Completed Technology Project (2004 - 2004)



## Project Introduction

A fundamental component of traffic flow management (TFM) is the rerouting of aircraft to alleviate congestion in constrained airspace. An integral concept in the future of TFM is a more collaborative process in which TFM disseminates airspace constraints and the users react with a selection of a (possibly) limited number of rerouting options. With the advent of more elaborate and collaborative traffic management initiatives, the NAS operators are now confronted with a myriad of options in rerouting and delay absorption that they have never before encountered. The only decision support tools currently available to the airlines are flight planning tools, which choose an optimal route for an isolated flight given the physical properties of the aircraft and some forecasted winds. This completely ignores the effects of traffic congestion and, therefore, the potential intervention of air traffic service providers. We propose to develop a flight rerouting decision support tool for use by the airlines that will allow rerouting choices to be made in the face of forecasted airspace constraints and traffic congestion.

## Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★ Ames Research Center(ARC)	Lead Organization	NASA Center	Moffett Field, California
Metron Aviation, Inc.	Supporting Organization	Industry	Dulles, Virginia



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## Organizational Responsibility

**Responsible Mission Directorate:**

Space Technology Mission Directorate (STMD)

**Lead Center / Facility:**

Ames Research Center (ARC)

**Responsible Program:**

Small Business Innovation Research/Small Business Tech Transfer

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### Primary U.S. Work Locations

California

Virginia

### Project Management

**Program Director:**

Jason L Kessler

**Program Manager:**

Carlos Torrez

**Principal Investigator:**

Robert Hoffman

### Technology Areas

**Primary:**

- TX16 Air Traffic Management and Range Tracking Systems
  - └ TX16.3 Traffic Management Concepts